

An insight to School Facilities, Guidelines to provide better traffic operations

(concerns and recent trends from across the state)



An insight to School Facilities





35% up to 68%

Parent / Student Ratio Is Still On The Rise

(Parent Vehicles per Student Population)

Delivering my child assures my child's safety

School buses are not safe

The lack of discipline on the bus may be traumatizing

Unsupervised activities occur on buses

Older students teach younger children unwanted actions

It's not COOL to ride a bus

Socially, driving my child is the only option

Riding in my vehicle provides quality time with my child

Campus provides opportunities to have discussions w/ teachers & other parents



Building Alternatives

Turning preexisting sites into school buildings

- Office Complex
- Abandoned Shopping Center

Building Concerns

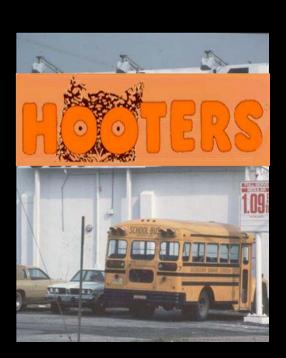
Impacts To Roadway Infrastructure?

Existing Driveway Access?

School Traffic Patterns?

Turning Lanes?

Pedestrian Access?





NCDOT School Traffic Calculator

Traffic counts indicate <u>minimum</u> driveway requirements for an <u>average</u> school traffic day.

Counts do not include high traffic demand days such as Monday's, Friday's, rainy days, special events, or holidays.

During peak demands, the school should be expected to have an alternative traffic plan (longer traffic route, double queue).

Campus site plan should provide driveway expandability for unplanned student population increase (mobile units, new buildings).

Policy on Street and Driveway Access to North Carolina Highways

For schools, adequate storage for parental drop-off and pick-up areas should be provided entirely on the school campus site.



Schools shall coordinate campus designs with NCDOT

Policy On Street And Driveway Access to North Carolina Highways

G.S. 136-18 (29A) requires that upon acquiring land for new schools or for relocating/expanding an existing school, <u>all public and private school systems shall coordinate with the NCDOT's local Division Engineer on an evaluation of the driveway access and traffic operational and safety impacts to the State Highway System resulting from the development of the proposed site. The Division Engineer will provide written recommendations to the school system based on the NCDOT's findings. The school system should consider these recommendations prior to proceeding with site development.</u>

School systems are encouraged to coordinate with the NCDOT <u>prior to acquiring land</u> for future school sites to avoid placing facilities in areas that may result in operation and safety issues.



Off-Site Improvements

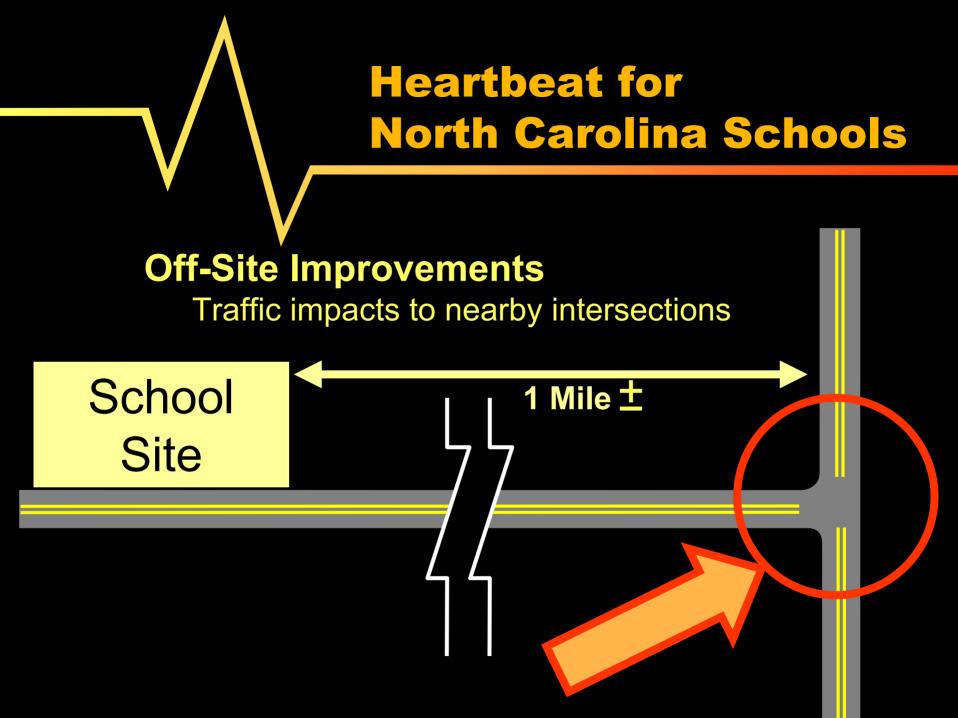
Traffic impacts to nearby intersections

Policy On Street And Driveway Access to North Carolina Highways

The Department may require off-site improvements at locations not immediately adjacent to the property.

Justification:

Such off-site improvements are needed to improve public safety and traffic operational impacts caused by development site traffic. Examples of such off-site improvements are intersection improvements, adding new or upgrading existing signals.





Right turn lanes are not mandatory but do require special consideration.

Policy On Street And Driveway Access to North Carolina Highways

Generally left and right turn lanes and tapers shall be considered when:

- in accordance with G.S. 136-18(29), the combined (existing and proposed development generated) average daily traffic meets or exceeds 4,000 vehicles per day on any secondary route (the average daily traffic should include both the existing traffic plus traffic generated by the proposed development);
- any US or NC route is being accessed;
- the District Engineer determines that such treatment is necessary to avoid congestion or unsafe conditions on the state-maintained roadway;
- or the TIS identifies a need for an auxiliary lane or taper.

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The District Engineer has final authority on decisions regarding infrastructure improvements.



Guidelines to provide better traffic operations



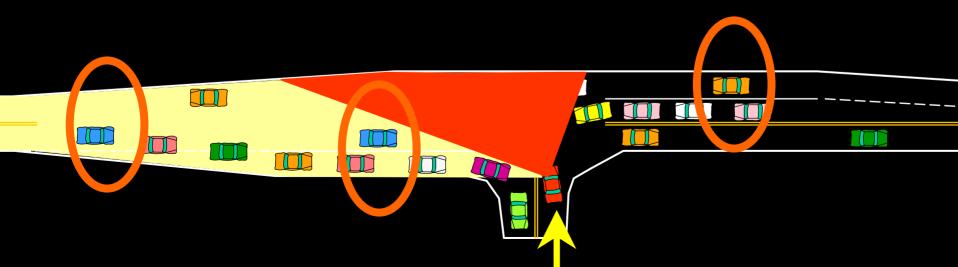
Look for these signs



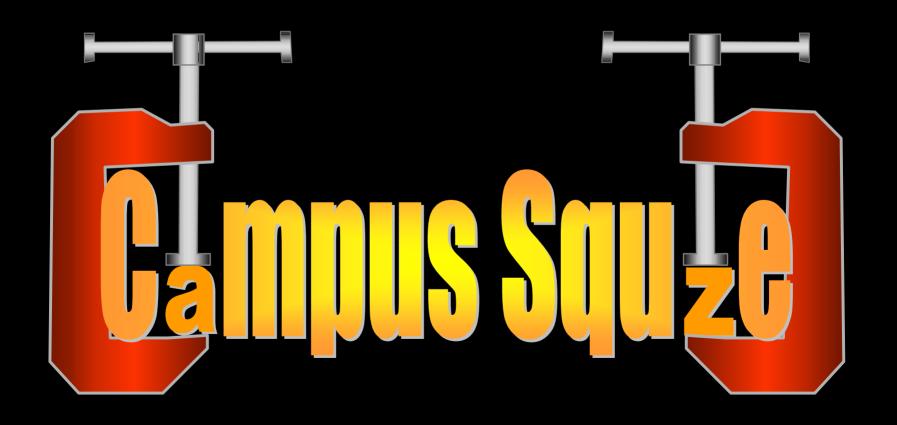
Blind Spot

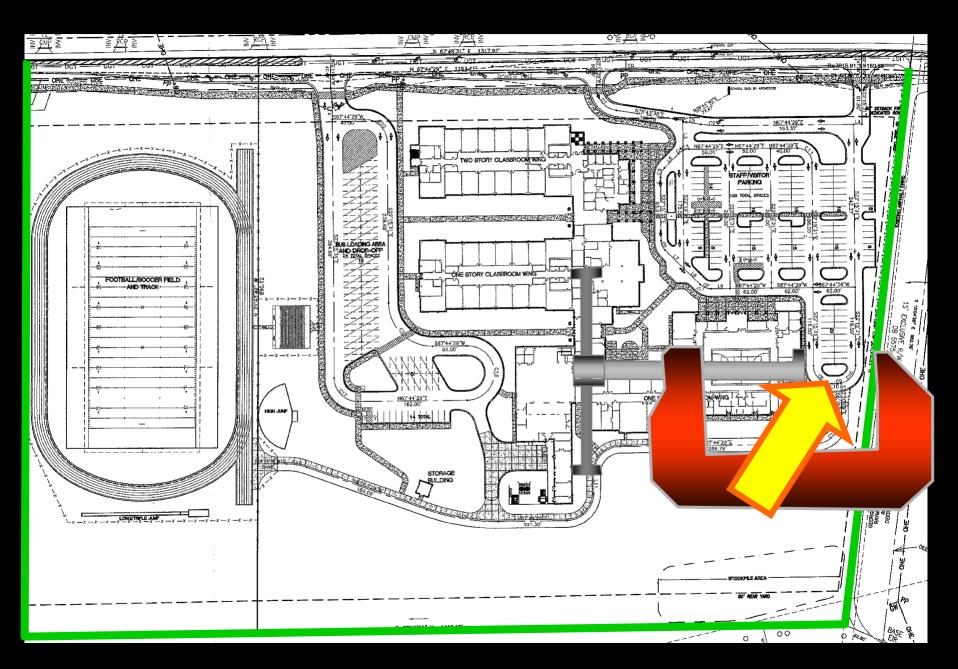
Vehicles stopped in roadway can:

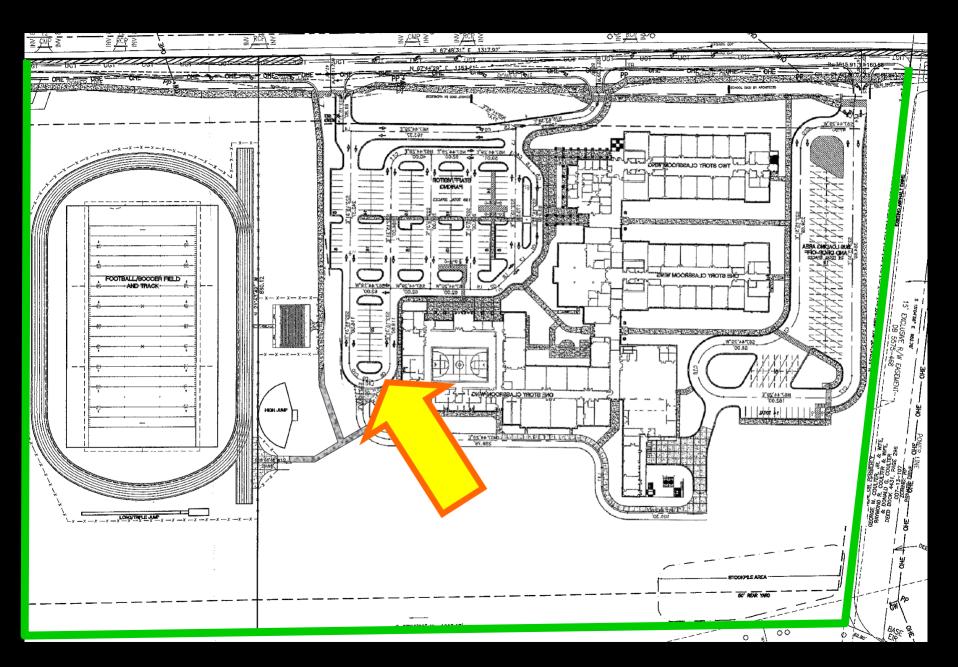
- Reduce traffic sight distance
- Increase the chance for a vehicle crash

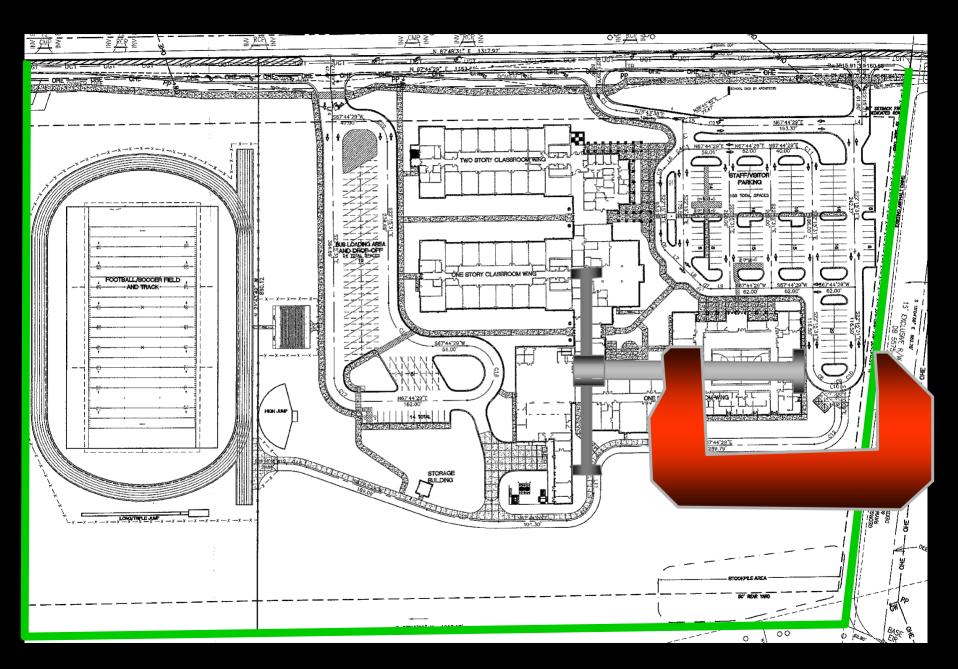




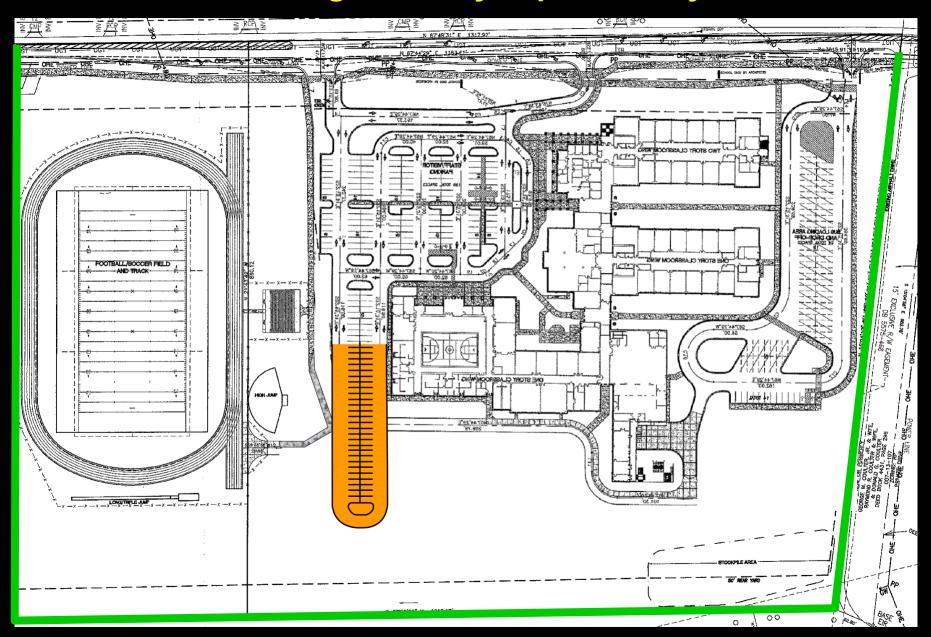






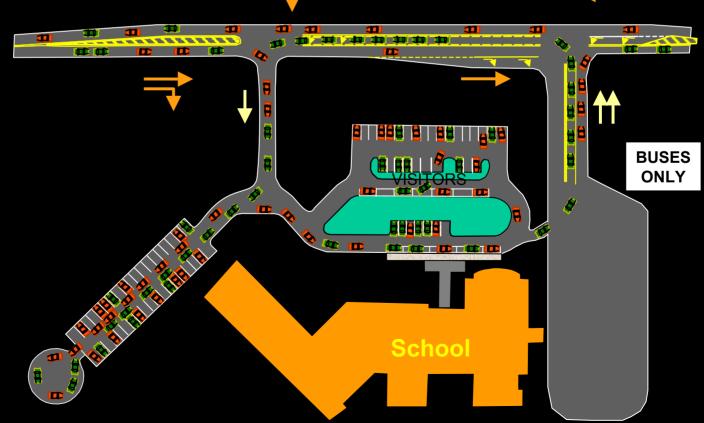


Providing driveway expandability

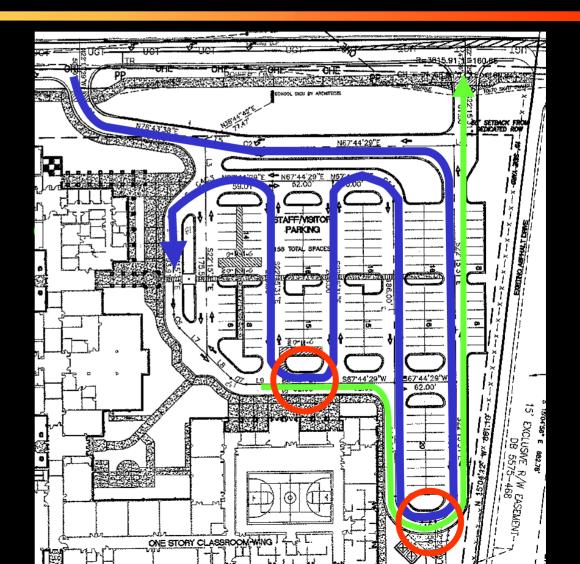


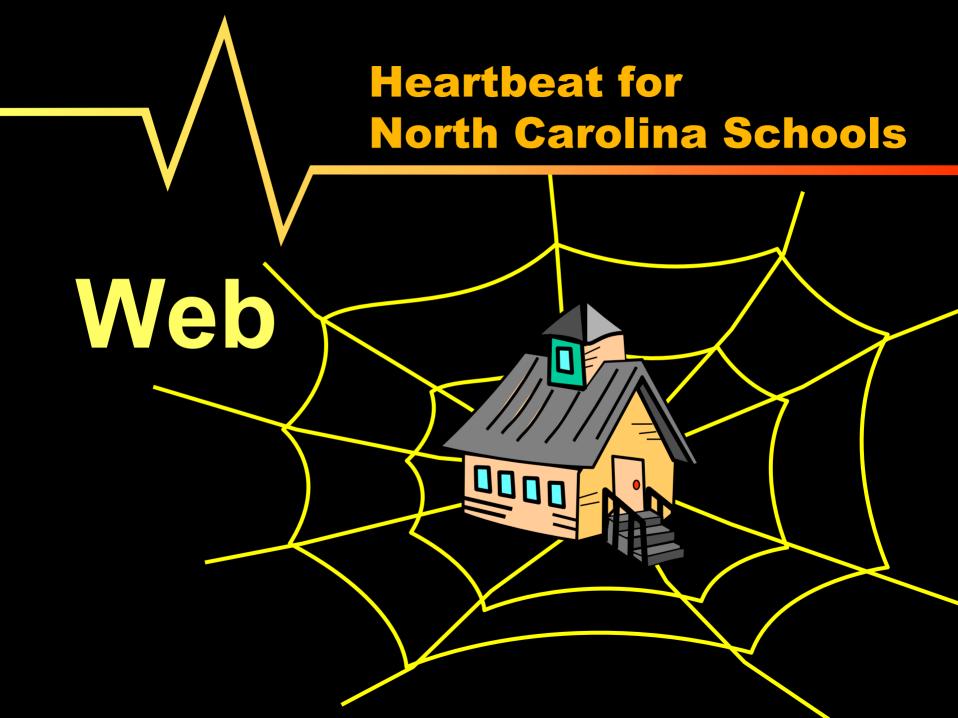
Free Flow

One-way Traffic Can Reduce Vehicle Conflicts



Maze

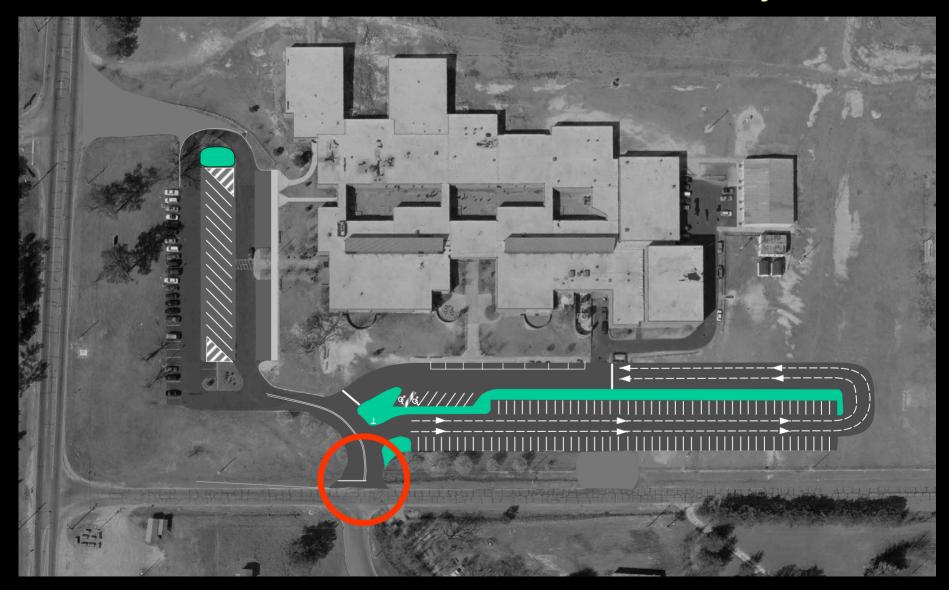




Reduce the number of driveways



Reduce the number of driveways



IMSTA and YOU working together to provide

Safe Roads to Schools

